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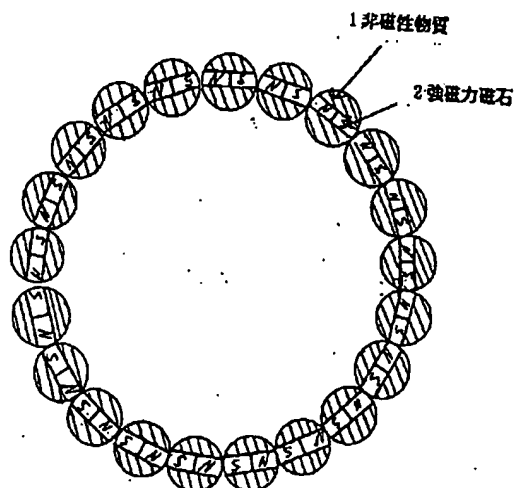
(21) 出願番号	特願平9-311012	(71) 出願人	593138540 桜井 力 神奈川県厚木市愛甲484番3号 コートア ムール102号室
(22) 出願日	平成9年(1997)10月6日	(72) 発明者	桜井 力 神奈川県厚木市愛甲484番3号コートア ムール102号室

(54) 【発明の名称】 通しひも、連結金具を用いない磁気ブレスレット

(57) 【要約】

【課題】 玉を構成要素とするブレスレットにおいて、通しひもや連結金具を使用しないで、ブレスレットを構成している玉そのものを自由に取り外しができるようにし、玉の様々な組合せ（色、形、大きさ等）を可能にして、非常に多様性に富んだブレスレットを提供することが目的である。

【解決手段】 ブレスレットを構成している玉として磁石に吸いつく力の弱い物質を使用しその中にネオジム磁石等の磁力の強い磁石を入れる。磁力を利用してこれらの玉を次々と連結させてリング状にしブレスレットを形作る。



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体が磁石である磁石玉5を使用する。一方図3(b)に示したようにアルファベットやハート型の装飾品6を磁性物質7と非磁性物質8で作成する。磁性物質7には磁石玉5と同一の曲率半径を持つ窪み9があり、この窪みの中に磁石玉5を吸着させる。これらの装飾品は磁気プレスレットにワンポイント効果をもたらす。

#### 【0009】実施例4

図4に基づいて実施例4を説明する。玉の色を様々な組み合わせさせた実施例1のプレスレットの一例を図4(a)に示す。図4(b)は玉の大きさを、また図4(c)は玉の形をそれぞれ様々な組み合わせさせたプレスレットの一例である。さらにこれら3要素を組み合わせることも可能である。

#### 【0010】

【発明の効果】外側が非磁性物質で内部に強磁力磁石を挿入した玉を構成要素とする磁気プレスレットは通しひもや連結金具が不用である。また構造が複雑でないため安価に仕上がる。玉同志は強磁力磁石のためしっかりと吸着されている一方、磁石の表面に曲率を持たせてお互いの玉をほぼ点接触させると、玉同志の吸着方向とは垂直の方向（磁力線に垂直な方向）からは指を玉同志の中に入れることによる磁力線の減少およびこの作用との相乗効果で玉同志は簡単に引き離すことができる。またひも、連結金具を使用しないため本発明においては各個人が様々な色、形、大きさの玉を組み合わせ、全体の長さも変えられ非常にバラエティに富んだプレスレット

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が作成可能となる。アルファベットやハート型の装飾品も玉の一部に吸着させればワンポイント効果も生まれ、幼児が使用すれば楽しみながらの学習効果も期待できる。そして完成されたプレスレットは限りなく様々な種類のものが出来上がる。まさに新しいプレスレットの形態と言える。そしてそれは各個人の個性が浮き出た特有のものとなる。

#### 【図面の簡単な説明】

【図1】本考案の断面図である。

【図2】本考案の実施例2を示した断面図である。

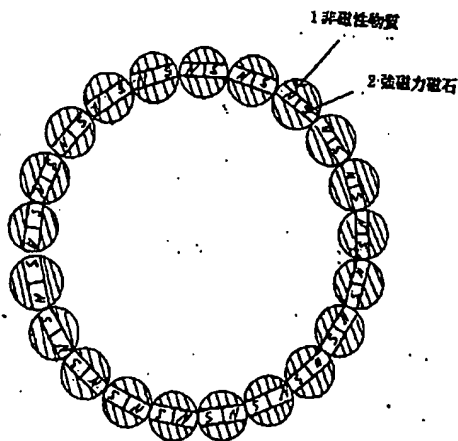
【図3】本考案の実施例3を示した断面図および斜視図である。

【図4】本考案の実施例4を示した平面図である。

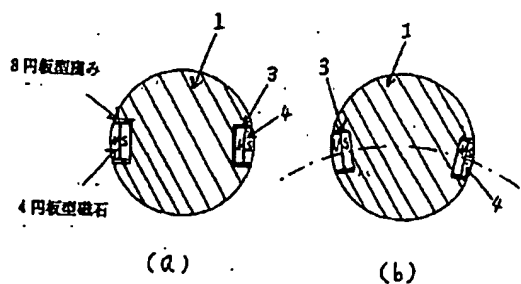
#### 【符号の説明】

- 1 非磁性物質
- 2 強磁力磁石
- 3 円板型窪み
- 4 円板型磁石
- 5 磁石玉
- 6 装飾品
- 7 磁性物質
- 8 非磁性物質
- 9 窪み
- 10 色A
- 11 色B
- 12 色C

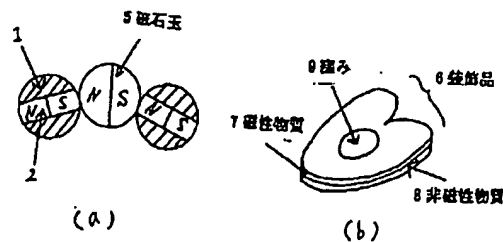
【図1】



【図2】



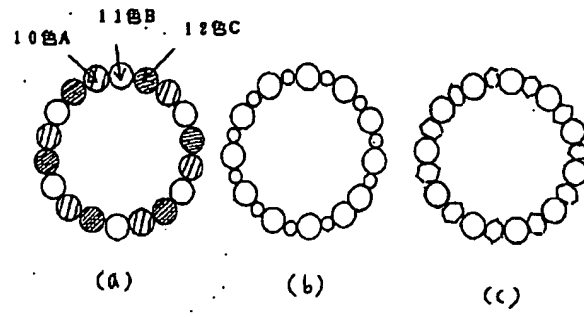
【図3】



(4)

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【図4】





L1: Entry 1 of 1

File: JPAB

Apr 20, 1999

PUB-NO: JP411103915A

DOCUMENT-IDENTIFIER: JP 11103915 A

TITLE: MAGNETIC BRACELET WITHOUT USING THROUGH CORD AND METALLIC CONNECTOR

PUBN-DATE: April 20, 1999

INVENTOR-INFORMATION:

NAME

SAKURAI, TSUTOMU

COUNTRY

ASSIGNEE-INFORMATION:

NAME

SAKURAI TSUTOMU

COUNTRY

APPL-NO: JP09311012

APPL-DATE: October 6, 1997

INT-CL (IPC): A44 C 25/00; A44 C 5/00; A44 C 5/00; A61 N 2/08

**ABSTRACT:**

PROBLEM TO BE SOLVED: To unnecessitate a through cord and a metallic connector, to separate balls from each other by putting a ferromagnetic magnet such as a neodymium magnet in a nonmagnetic matter whose force sucked to a magnet is weak and to enrich variety by separating the balls from each other and combining various balls to vary the length of the whole of them.

SOLUTION: The structure of the ball is prepared by putting the ferromagnetic magnet 2 in the form as a cylinder in a nonmagnetic matter 1. At the time of equalize the radius of curvature of the surface of the magnet 2 with the radius of curvature of the matter 1, the whole balls are made spherical to arrange the balls neatly in a ring-form. The balls are not detached easily from one another even at the time of swinging around a hand once they are attracted the operation of the magnet 2. At the time of providing a curvature for the surface of a magnet to bring the ball nearly into point contact with each other, the balls can simply be detached by the multiplier effect of the reduction of magnetic force line made by putting a finger into mutual balls in a direction vertical to the attracting direction of the mutual balls and the operation of a lever while having strong attracting force in the direction of magnetic lines.

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Fig 3(2) BEAD CONSISTS OF A SPHERICAL MAGNET  
Fig 4(2) DIFFERENT COLOR COATINGS  
ON MAGNETS

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L2: Entry 1 of 1

File: DWPI

Apr 20, 1999

DERWENT-ACC-NO: 1999-305875

DERWENT-WEEK: 199926

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TITLE: Cordless magnetic bracelet used by children - consists of serially connected balls made of non-magnetic material having neodymium magnet, penetrated through hollow disc on either side of wall

PATENT-ASSIGNEE:

ASSIGNEE

CODE

SAKURAI C

SAKUI

PRIORITY-DATA: 1997JP-0311012 (October 6, 1997)

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PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
<input type="checkbox"/> <u>JP 11103915 A</u>	April 20, 1999		004	A44C025/00

APPLICATION-DATA:

PUB-NO	APPL-DATE	APPL-NO	DESCRIPTOR
JP 11103915A	October 6, 1997	1997JP-0311012	

INT-CL (IPC): A44 C 5/00; A44 C 25/00; A61 N 2/08

ABSTRACTED-PUB-NO: JP 11103915A

BASIC-ABSTRACT:

NOVELTY - The magnetic bracelet consists of balls connected magnetically. A Neodymium magnet (2), possessing strong magnetism is penetrated inside the ball-like non-magnetic material (1) via a hollow disc on either side of the ball.

USE - For use by children.

ADVANTAGE - Bracelet is cheap as it is easy to make because of its simple structure. Various color combination can be made and the length of bracelet can be changed since cord and connection fittings are not used. DESCRIPTION OF DRAWING(S) - The figure shows the sectional view of the design of magnetic bracelet. (1) Non-magnetic material; (2) Neodymium magnet.

CHOSEN-DRAWING: Dwg.1/4

TITLE-TERMS: CORD MAGNETIC BRACELET CHILD CONSIST SERIAL CONNECT BALL MADE NON MAGNETIC MATERIAL NEODYMIUM MAGNET PENETRATE THROUGH HOLLOW DISC SIDE WALL

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1. This document has been translated by computer. So the translation may not reflect the original precisely.
2. \*\*\*\* shows the word which can not be translated.
3. In the drawings, any words are not translated.

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DETAILED DESCRIPTION

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[Detailed Description of the Invention]

[0001]

[Field of the Invention] This invention relates to the bracelet which connected each ball using the magnetic force without using a through string or connecting fitting in the bracelet which uses a ball as a component.

[0002]

[Description of the Prior Art] The bracelet which uses the conventional ball as a component made the hole in each ball, and connecting fitting was used there and it was using it as goods through the string. Moreover, although there was a necklace which used the magnet for some balls, the purposes are the health effectiveness and partial connection and the string etc. was used (open practical use Taira 4-36821). the accessory which covers one half extent of a ball qualitatively of a magnetic matter, and detaches and attaches an accessory base and a ball using a magnet, a screw, etc. — it was (JP,8-38224,A) — once the bracelet used only the ball as the constituent and moreover adsorbed it, it did not separate easily, and when it was going to remove with the finger, there was no bracelet with the structure which can be removed easily.

[0003]

[Problem(s) to be Solved by the Invention] The bracelet which uses the conventional ball as a component had the following faults. Since there were a through string and connecting fitting, the ball could not be removed, but it is fixed, and various combination (a color, a form, magnitude, etc.) of a ball was impossible for the location, and it lacked in versatility. \*\*\*\* is made in order to cancel these faults.

[0004]

[Means for Solving the Problem] The bracelet concerning this invention is what solved the above technical problems, and has the following structures. As shown in drawing 1, magnetism is used as each other ball comrade's adsorption power. Put in and create the magnet 2 with the powerful magnetism of a neodymium magnet etc. (it abbreviates to a strong magnetism magnet hereafter) in the weak matter (it abbreviates to the nonmagnetic matter hereafter) 1 of the force which sticks to a magnet as structure of the ball used as the component of a bracelet, this ball is made to connect one after another using magnetism, it arranges in the shape of a ring, and a bracelet is formed.

[0005]

[Embodiment of the Invention] One side serves as N pole and, as for the ball which is the component of a bracelet, another side serves as the south pole. For this reason, if the south pole (N pole) of one ball with which a ball will be rich N pole (or south pole) is brought close, an automatically mutual ball comrade will pay well and adsorb. Even if it brings close N pole (south pole) of one ball with which a ball will be rich N pole (or south pole), in order that a ball comrade may oppose, a ball rotates with nature, and it sticks to each other ball easily. This is repeated, it is made the shape of a ring, and a bracelet is done.

[0006]

[Example]

An example 1 is explained based on example 1 drawing 1. In order not to draw near various qualities of a magnetic matter of perimeters other than the ball comrade who forms the bracelet, it is necessary to

reduce the number and consistency of line of magnetic force which spread around a bracelet. In order to make a ball comrade connect without using a through string and connecting fitting furthermore, a strong magnetism magnet is used. As for that shown in drawing 1, the cylindrical strong magnetism magnet 2 is put in and created in the nonmagnetic matter 1 as structure of a ball. If it is made for the radius of curvature of the front face of a magnet 2 to become equal to the radius of curvature of the nonmagnetic matter 1, it becomes spherical as the whole ball and a ball comrade can arrange in the shape of a ring finely. Once a ball comrade adsorbs in an operation of a strong magnetism magnet, even if he will brandish a hand, it does not separate from him easily. This is because it has strong adsorption power in a ball comrade's adsorption direction, and the direction of \*\*\*\* bee line of magnetic force. In the direction (direction perpendicular to line of magnetic force) perpendicular to a ball comrade's adsorption direction, it can pull away easily by reduction of the line of magnetic force by putting in a finger into a ball comrade, and the synergistic effect with an operation of a lever, having adsorption power strong against the direction of line of magnetic force, when curvature is given on the surface of a magnet here and point contact of each other ball is carried out mostly. Moreover, if a magnet 2 is colored the nonmagnetic matter 1 for the whole ball after insertion, or a magnet 2 is put into the interior of the nonmagnetic matter 1 and it covers, a magnet 2 will not appear from an outside but its esthetic property will increase.

[0007] An example 2 is explained based on example 2 drawing 2. The magnetic bracelet which uses as a component the ball which opened the disk rabbit ear 3 in a part of front face of the nonmagnetic matter 1, opened the disk rabbit ear 3 also in the true opposite side as shown in drawing 2 (a), and pasted up the disk mold magnet 4 on each hollow. If the radius of curvature by the side of the front face of the disk mold magnet 4 is made equal to the radius of curvature of the nonmagnetic matter 1, as for a ball comrade, a list and attachment and detachment will become easy finely like an example 1 at the shape of a ring. the pole of the magnet by the side of a front face -- two magnets -- the contrary -- even when -- being the same. Moreover, if the core of two hollows 3 is turned in a ball comrade's adsorption direction as shown in drawing 2 (b), a ball comrade will be connected further smoothly.

[0008] An example 3 is explained based on example 3 drawing 3. The magnet ball 5 whose whole is a magnet about some is used among the balls which constitute the bracelet as shown in drawing 3 (a). As shown in drawing 3 (b) on the other hand, the accessories 6 of the alphabet or a heart mold are created by the quality 7 of a magnetic matter, and the nonmagnetic matter 8. There is a hollow 9 which has the same radius of curvature as the magnet ball 5 in the quality 7 of a magnetic matter, and the magnet ball 5 is made to adsorb into this hollow. These accessories bring the one spot effectiveness to a magnetic bracelet.

[0009] An example 4 is explained based on example 4 drawing 4. An example of the bracelet of the example 1 which combined the color of a ball variously is shown in drawing 4 (a). It is an example of the bracelet with which drawing 4 (b) combined the magnitude of a ball, and drawing 4 (c) combined the form of a ball variously, respectively. It is also possible to combine these 3 element furthermore.

[0010]

[Effect of the Invention] The magnetic bracelet which uses as a component the ball with which the outside inserted the strong magnetism magnet in the interior by the nonmagnetic matter has a through string and unnecessary connecting fitting. Moreover, since structure is not complicated, it is finished cheaply. If the ball comrade gives curvature on the surface of a magnet and does point contact of each other ball mostly while he is firmly adsorbed for the strong magnetism magnet, a ball comrade can pull away easily by reduction of the line of magnetic force by putting in a finger into a ball comrade from a direction (direction perpendicular to line of magnetic force) perpendicular to a ball comrade's adsorption direction, and the synergistic effect with an operation of a lever. Moreover, since a string and connecting fitting are not used, creation of the bracelet with which the whole die length was also changed and with which each people were very rich in variety combining the ball of various colors, a form, and magnitude in this invention is attained. Accessories, such as the alphabet and a heart mold, are made to stick to some balls, and the one spot effectiveness is born, and the study effectiveness if a small child uses, while enjoying itself can also be expected. And the thing of a class with them is done. [ the completed infinite bracelet and ] [ various ] It can just be said to be the gestalt of a new bracelet. And it becomes the